

CLAIMS:

1. A disk brake comprising:
a disk rotor;
a pair of pads with respective back plates;
a pressing device arranged and constructed to press the pads against the disk rotor;
a shim disposed between the back plate of each pad and the pressing device and defining a space for storing a grease between the shim and the back plate, the shim comprising a first shim member and a second shim member overlaid with each other and disposed on the side of the back plate and the pressing device, respectively, so that the space is defined between the first shim member and the back plate; and
storage regions defined within the first shim member throughout the thickness of the first shim member in order to store and retain the grease; wherein:
the storage regions are configured such that the grease substantially entirely covers the openings of the storage regions and is retained within the storage regions by the surface tension of the grease at least when the temperature of the grease is within a range of 20 to 200 °C.
2. A disk brake as in claim 1, wherein the storage regions comprise slits.
3. A disk brake as in claim 2, wherein each of the slits has a width within a range of 0.5 to 2.0 mm.
4. A disk brake as in claim 1, wherein the storage regions comprise substantially circular through holes.
5. A disk brake as in claim 4, wherein each of the through holes has a diameter within a range of 0.5 to 2.0 mm
6. A disk brake comprising:
a disk rotor;

- a pair of pads;
- a pressing device arranged and constructed to press the pads against the disk rotor;
- a shim attached to each pad and opposing to the pressing device, so that a space is defined between each pad and the corresponding shim in order to store a grease, and
- storage regions defined within the shim in communication with the space in order to store and retain the grease;
- wherein the storage regions are configured to retain the grease by the surface tension of the grease such that the grease is filled up within the storage regions at least when the temperature of the grease is within a range of 20 to 200°C.
7. A disk brake as in claim 6, wherein the storage regions are configured as recesses each opening into the space and having a closed end on the side opposite to the space;
8. A disk brake as in claim 7, wherein the recesses have elongated configurations and extend substantially parallel to each other.
9. A disk brake as in claim 8, wherein each of the recesses has a width within a range of 0.5 to 2.0 mm.
10. A disk brake as in claim 8, wherein the recesses extend along a substantially radial direction about a rotational axis of the disk rotor.
11. A disk brake as in claim 7, wherein the recesses have substantially circular configurations.
12. A disk brake as in claim 11, wherein each of the recesses has a diameter within a range of 0.5 to 2.0 mm
13. A disk brake as in claim 7, wherein the shim comprises a first shim member and a second shim member overlaid with each other and disposed on the side of the corresponding pad and on the side of the pressing device, respectively, so that the space is defined between the

first shim member and the pad, and wherein the recesses are formed within the first shim member in communication with the space and the closed ends of the recesses terminate at the second shim member.